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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,577	12/21/2001	Peter Schertl	Mo6856/LeA 33,769	1797

7590 12/14/2006

LANXESS CORPORATION
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EXAMINER

RABAGO, ROBERTO

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/019,577

Applicant(s)

SCHERTL ET AL.

Examiner

Roberto Rábago

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7,9-11,16,19 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7,9-11,16,19 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/29/2006 has been entered.

Claim Rejections - 35 USC § 112

2. Claims 4, 5, 7 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Each of claims 4 and 5 (and claims 7 and 10 by dependency) recites a cocatalyst first as optional, then later as required, and therefore the status of the cocatalyst cannot be determined.

Claim Rejections - 35 USC § 103

3. Claims 1, 3-5, 7, 9-11, 16, 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirooka et al. (US 3,700,648) for the reasons set forth in item 3 of the Office action mailed 9/14/2005.

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Applicants' arguments filed 11/29/2006 have been fully considered but they are not persuasive. Applicants persist in maintaining that the reference fails to disclose the required transition metal species, particularly with respect to the Q substituent. However, repeating from the prior Office action, the acetylacetonate (acac) ligand is a monoanionic 2-dentate ligand, and therefore this ligand is within the scope of both L and Q. Since the cited reference species have at least two acac ligands, the first functions as L and the second functions as Q. There is nothing in the claims which requires L and Q to be different, and therefore the reference species are within the scope of transition metal compounds required in the claims. Applicants' argument regarding the cocatalyst recommended in the reference is entirely without basis, because the instant claims also include the optional or required presence of a cocatalyst; applicants have clearly structured their claims to include as catalyst the reaction product of the transition metal compound and a cocatalyst. Finally, applicants continue with their earlier argument regarding the required transition metal compound. However, it is repeated that that the reference explicitly suggests use of the required transition metal compounds at col. 11, lines 14-17, in the form of chromium, iron, cobalt and nickel acac complexes.

4. Claims 5, 7, 9, 10, 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lipian et al. (US 6,455,650) for the reasons set forth in item 4 of the Office action mailed 9/14/2005.

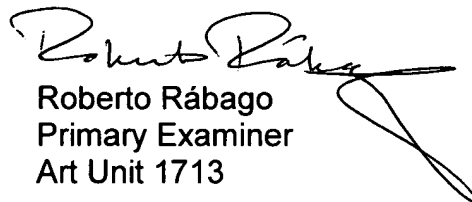
Applicant's arguments filed 11/29/2006 have been fully considered but they are not persuasive. Applicants argue that the reference does not disclose copolymerization of polar and non-polar monomers. However, none of the claims require the copolymerization of polar and non-polar monomers, and therefore the reference need not disclose such use. Claims 5, 7, 9, 16 and 19 are composition claims with an intended use limitation; the reference disclosure meets the intended use limitation if it is capable of such use. In this case, the reference composition is clearly capable of copolymerization of polar and non-polar monomers because this use has been clearly suggested; as previously stated, most of the working examples are copolymerizations of polar and non-polar norbornenes, and the descriptions at col. 29-37 disclose a wide array of polar and non-polar monomers for copolymerization. Claim 10 is a method claim, but is not limited to any particular monomers. Applicants further argue that Lipian fails to disclose the required transition metal compound on the grounds that L' or L'' must be removed to arrive at the claimed structure. However, Q is defined in applicants' claims as a mono-anionic or non-ionic ligand, and therefore the reference groups L' and L'' (which are non-ionic groups) are within the scope of Q, and need not be removed to meet the claimed structure.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberto Rábago whose telephone number is (571) 272-1109. The examiner can normally be reached on Monday - Friday from 8:00 - 4:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Roberto Rábago
Primary Examiner
Art Unit 1713

RR
December 8, 2006